HIRATA, Sanae Appl. No. 09/988,179 January 16, 2004

AMENDMENTS TO THE SPECIFICATION:

Please amend the paragraph beginning at page 1, line 18, as follows:

Electronic control systems have the monitoring function to detect a microcomputer malfunction by monitoring operations of a plurality of microcomputers <u>against</u> one another. For example, an electronic control system of a vehicle has an engine control microcomputer for executing engine control (spark ignition, fuel injection or the like) and a throttle control microcomputer for executing electronic throttle control. A monitoring program is provided in the engine control microcomputer, thereby to monitor the throttle control microcomputer in the engine control microcomputer. For instance, in U.S. Patent No. 6,230,094 (JP-A-11-294252), an engine control microcomputer monitors a throttle control microcomputer. When the engine control microcomputer detects malfunction of the throttle control microcomputer, the engine microcomputer resets the throttle control microcomputer and executes the throttle control in place of the throttle control microcomputer.

Please amend the paragraph beginning at page 2, line 7, as follows:

In order to increase reliability and safety of the throttle control microcomputer, it is desired to monitor operations of the monitoring program itself. Therefore, in JP-A-11-294252, <u>a</u> watch-dog pulse is outputted periodically, and the watch-dog pulse is inputted



HIRATA, Sanae Appl. No. 09/988,179 January 16, 2004

(h)3

to provide a hardware IC to watch the monitoring program.

Please amend the paragraph beginning at page 2, line 22, as follows:

According to the present invention, a first microcomputer is programmed to control a first object such as a fuel injection or ignition timing of an engine. The first microcomputer has a monitor program for checking malfunction of a second microcomputer periodically. The second microcomputer is programmed to control a second object such as a throttle driving motor. The first microcomputer comprises a timer and a timer setting unit. The timer increases or decreases time count in proportion to time, and switches itsthe output logic level of its port when the time count reaches a predetermined time. The timer setting unit sets a new time count in place of the time counted by the timer when an operation of the second microcomputer is normal and the monitor program is normal.

Please amend the paragraph beginning at page 6, line 3, as follows:

The timer 15 controls a transistor 16 based on the output logic level of the throttle relay port A. Namely, when the output logic level of the throttle relay port A is high, the transistor 16 is turned on to openclose a motor relay 23. Therefore, the motor drive circuit 13 is supplied with electric power from a battery to drive the throttle motor 22. On the other hand, when the output logic level of the throttle relay port A is low, the

Q5

HIRATA, Sanae Appl. No. 09/988,179 January 16, 2004

Û.5

transistor 16 is turned off to <u>eloseopen</u> the motor relay 23. Therefore, motor drive circuit 13 is not supplied with electric power from the battery to stop the throttle motor 22.

Please amend the paragraph beginning at page 11, line 13, as follows:

6

In the first to third embodiments, a timer for increasing time count can be utilized in place of the timer 15, 34 for decreasing time count. When the time counted by the timer reaches a predetermined time, an output logic level of a port is switched. In this case, when the throttle control function is not detected as malfunctioning and the monitor program is executed normally, the timer is reset to zero each time. To the contrary, when the throttle control function is detected as malfunctioning and the monitor program is not executed normally, the timer is not reset to zero. Thus, when the timer is not reset, the time counted by the timer reaches the predetermined time (e.g., 80 ms), the output logic level of the port is switched.